Attorney Docket No. 990502

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1.   (Previously Presented)   A method for controlling discontinuous transmissions, comprising:

determining a voice activity level in a digitized audio signal;

generating a control signal based on the level of voice activity detected;

generating active vocoder frames at a predetermined rate in a transmitter if said control signal indicates a first level of speech activity;

generating inactive vocoder frames if said control signal indicates a second level of speech activity; and

generating transition frames if said control signal indicates a transition from said first level to said second level, said transition frames comprising background noise information.

2.   (Currently Amended) A method for controlling discontinuous transmissions, comprising:

~~generating~~ receiving data frames at a receiver[[,]][[;]]said data frames comprising at least one of active, inactive or transition frame;

storing said data frames in a queue;

providing at least one of said data frames from said queue to a decryption module if available in said queue;

providing a state vector ~~to said decryption module~~, said state vector corresponding to the data frames ~~incremented at a predetermined rate~~; and

~~generating a codebook from said decryption module, using at least said state vector, said codebook for decrypting at least one of said data frames; and~~

~~disabling said state vector when said queue is in an underflow condition.~~

decrypting at least one of said data frames based on the corresponding state vector.

3.   (Cancelled)

4.   (Currently Amended) A discontinuous transmission controller, comprising:

a vocoder for generating active vocoder frames from a [[said]] digitized audio signal at a predetermined output rate if speech is present, for generating inactive vocoder frames during periods of speech inactivity, and for generating transition frames during transitions from speech activity to speech inactivity, said transition frames comprising background noise information.

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5.   (Currently Amended)   The receiver of claim 4 wherein a state vector is incremented ~~enabled~~ when at least one [[data]] active or transition frame is generated ~~becomes available for encryption in said queue~~.

6.   (Previously Presented)   A method for controlling discontinuous transmissions, comprising:

determining a speech activity level in a digitized audio signal;

generating a control signal based on the determined speech activity level;

generating active vocoder frames in a transmitter if said control signal indicates active speech activity;

generating no vocoder frame in the transmitter if said control signal indicates inactive speech activity; and

generating transition frames in the transmitter if said control signal indicates a transition between said active speech activity and inactive speech activity, said transition frames comprising comfort information.

7.   (Previously Presented)   The method of claim 6, wherein said comfort information includes background noise information.

8.   (Previously Presented)   A method for controlling discontinuous transmissions, comprising:

receiving digitized audio signal;

determining a speech activity level in the received digitized audio signal;

generating a control signal based on the determined speech activity level;

generating active vocoder frames in a transmitter if said control signal indicates active speech activity;

generating transition frames in the transmitter if said control signal indicates a transition between said active speech activity and inactive speech activity;

incrementing a state vector for each generated active or transition vocoder frame;

generating no vocoder frame in the transmitter if said control signal indicates inactive speech activity; and

disabling the state vector for each inactive vocoder frame.

9.   (Previously Presented)   The method of claim 8, further including encrypting the generated active and transition vocoder frames.

10.   (Currently Amended)   A method for controlling discontinuous transmissions, comprising:

receiving encrypted vocoder frames at a receiver[[;]], said data frames comprising at least one of active inactive, or transition frame;

storing said encrypted vocoder frames in a queue;

providing at least one of said encrypted vocoder frames from said queue to a decryption module if any is available in the queue;

incrementing providing a state vector associated with the for each encrypted vocoder frame[[s]] provided to the decryption module, the state vector for use[[r]] by the decryption module; and

disabling the state vector if no encrypted vocoder frame is available in the queue.

decrypting the encrypted vocoder frames provided to the decryption module using the associated state vector.

11.   (Currently Amended) The method of claim 10, further including:

decrypting the encrypted vocoder frames provided to the decryption module using the associated state vectors; and

generating comfort information if no encrypted vocoder frame was available in the queue.

12.   (Previously Presented) The method of claim 11, wherein the comfort information includes background noise.

13.   (Previously Presented) The method of claim 11, wherein the comfort information includes at least one recently decrypted vocoder frame.

14.   (Previously Presented) An apparatus for controlling discontinuous transmissions, comprising:

means for determining a speech activity level in a digitized audio signal;

means for generating a control signal based on the determined speech activity level;

means for generating active vocoder frames in a transmitter if said control signal indicates active speech activity;

means for generating no vocoder frame in the transmitter if said control signal indicates inactive speech activity; and

means for generating transition frames in the transmitter if said control signal indicates a transition between said active speech activity and inactive speech activity, said transition frames comprising comfort information.

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15.   (Previously Presented)   The apparatus of claim 14, wherein said comfort information includes background noise information.

16.   (Previously Presented) An apparatus for controlling discontinuous transmissions, comprising:

    means for receiving digitized audio signal;

    means for determining a speech activity level in the received digitized audio signal;

    means for generating a control signal based on the determined speech activity level;

    means for generating active vocoder frames in a transmitter if said control signal indicates active speech activity;

    means for generating transition frames in the transmitter if said control signal indicates a transition between said active speech activity and inactive speech activity;

    means for incrementing a state vector for each generated active or transition vocoder frame;

    means for generating no vocoder frame in the transmitter if said control signal indicates inactive speech activity; and

    means for disabling the state vector for each inactive vocoder frame.

17.   (Previously Presented) The apparatus of claim 8, further including encrypting the generated active and transition vocoder frames.

18.   (Currently Amended) An apparatus for controlling discontinuous transmissions, comprising:

    means for receiving encrypted vocoder frames at a receiver[[;]], said data frames comprising at least one of active inactive, or transition frame;

    means for storing said encrypted vocoder frames in a queue;

    means for providing at least one of said encrypted vocoder frames from said queue to a decryption module if any is available in the queue;

    means for incrementing providing a state vector for each associated with the encrypted vocoder frame[[s]] provided to the decryption module, the state vector for use[[r]] by the decryption module; and

    means for disabling the state vector if no encrypted vocoder frame is available in the queue. decrypting the encrypted vocoder frames provided to the decryption module using the associated state vector.

19.   (Previously Presented) The apparatus of claim 18, further including:

means for decrypting the encrypted vocoder frames provided to the decryption module using the associated state vectors; and

means for generating comfort information if no encrypted vocoder frame was available in the queue.

20.   (Previously Presented)   The apparatus of claim 19, wherein the comfort information includes background noise.

21.   (Previously Presented)   The apparatus of claim 19, wherein the comfort information includes at least one recently decrypted vocoder frame.

22.   (Previously Presented)   A computer-readable medium embodying means for implementing a method for controlling discontinuous transmissions, the method comprising:

determining a speech activity level in a digitized audio signal;

generating a control signal based on the determined speech activity level;

generating active vocoder frames in a transmitter if said control signal indicates active speech activity;

generating no vocoder frame in the transmitter if said control signal indicates inactive speech activity; and

generating transition frames in the transmitter if said control signal indicates a transition between said active speech activity and inactive speech activity, said transition frames comprising comfort information.

23.   (Previously Presented) The computer-readable medium of claim 22, wherein said comfort information includes background noise information.

24.   (Previously Presented)   A computer-readable medium embodying means for implementing a method for controlling discontinuous transmissions, the method comprising:

receiving digitized audio signal;

determining a speech activity level in the received digitized audio signal;

generating a control signal based on the determined speech activity level;

generating active vocoder frames in a transmitter if said control signal indicates active speech activity;

generating transition frames in the transmitter if said control signal indicates a transition between said active speech activity and inactive speech activity;

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incrementing a state vector for each generated active or transition vocoder frame;

generating no vocoder frame in the transmitter if said control signal indicates inactive speech activity; and

disabling the state vector for each inactive vocoder frame.

25.   (Previously Presented) The computer-readable medium of claim 24, the method further including encrypting the generated active and transition vocoder frames.

26.   (Currently Amended) A computer-readable medium embodying means for implementing a method for controlling discontinuous transmissions, the method comprising:

receiving encrypted vocoder frames at a receiver[[;]]said data frames comprising at least one of active, inactive or transition frame;

storing said encrypted vocoder frames in a queue;

providing at least one of said encrypted vocoder frames from said queue to a decryption module if any is available in the queue;

incrementing providing a state sector for each associated with the encrypted vocoder frame[[s]] provided to the decryption module, the state vector for use[[s]] by the decryption module; and

disabling the state vector if no encrypted vocoder frame is available in the queue.

decrypting the encrypted vocoder frames provided to the decryption module using the associated state vector.

27.   (Currently Amended) The computer-readable medium of claim 26, the method further including:

decrypting the encrypted vocoder frames provided to the decryption module using the associated state vectors; and

generating comfort information if no encrypted vocoder frame was available in the queue.

28.   (Previously Presented) The computer-readable medium of claim 27, wherein the comfort information includes background noise.

29.   (Previously Presented) The computer-readable medium of claim 27, wherein the comfort information includes at least one recently decrypted vocoder frame.

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